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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/039,049	12/31/2001	James F. Frye JR.	H052617.1138US0	4758
1200	7590	12/10/2004	EXAMINER	
AKIN, GUMP, STRAUSS, HAUER & FELD 1111 LOUISIANA STREET 44TH FLOOR HOUSTON, TX 77002			ELAMIN, ABDELMONIEM I	
			ART UNIT	PAPER NUMBER
			2116	

DATE MAILED: 12/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/039,049

Applicant(s)

FRYE, JAMES F.

Examiner

A Elamin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 December 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-4 and 6-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Anand et al, US, Pat. No. 6,810,478.

3. Claim 1, Anand teaches a method of directing a computer network for booting using an embedded operating system based computer [*title, abstract, col. 2, lines 39-52*], the method comprising:

Listening with an embedded operating system based computer [*col. 3, lines 44-49*] to PXE requests from a plurality of PXE enabled target servers of a computer network [*col. 2, lines 42-45*]; and

providing from the embedded operating system based computer to one of the plurality of PXE enabled target servers a netboot program and address of a boot server from the PXE appliance responsive to a PXE request from one of the PXE enabled target servers [*abstract, col. 2, lines 39-52*].

4. Claim 2, Anand teaches the computer network comprises a plurality of subnetworks of PXE enabled target servers [*col. 3, lines 44-49*].

5. Claim 3, Anand teaches the embedded OS based computer listens to one of the subnetwork [*abstract*].
6. Claim 4, Anand teaches the embedded OS based computer listens to one of the subnetwork by wireless communication [*col. 3, lines 9-19*].
7. Claim 6, Anand teaches the plurality of PXE enabled target servers are part of a subnetwork of the computer network [*Fig. 1*].
8. Claims 7-8, Anand teaches the listening step is performed through a TCP/IP stack [*col. 1, lines 25-28*].
9. Claims 9-10, 13, Anand teaches transferring a boot image from the boot server responsive to netboot program executing on one of the PXE enabled target servers [*col. 6, line 51*].
10. Claim 11, Anand teaches the boot image is provided by wireless communication [*col. 3, lines 9-19*].
11. Claim 12, Anand teaches the boot image comprises response to preboot environment queries [*col. 3, lines 20-30*].
12. Claim 14, Anand teaches the boot image comprises code to install at least one operating system [*abstract*].
13. Claim 15, Anand teaches the boot image comprises application software [*col. 3, lines 9-19*].
14. Claim 16, Anand teaches the netboot program is executed out of a read-only memory [*Figs. 2 and 3*].

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15. Claim 17, Anand teaches the boot image is transferred using a trivial file transfer protocol [*col. 1, line 19*].
16. Claim 18-21, Anand teaches the PXE enabled server is booted by executing the boot image [*abstract*].
17. Claims 22 and 30, Anand teaches a NIC; a microcontroller coupled to the NIC ... [*Fig. 2*].
18. Claims 23-24, Anand teaches a display coupled to the processor and an input device coupled to the processor [*inherently computers comprise displays and input devices*].
19. Claims 25 and 31, Anand teaches a memory coupled to the processor [*Fig. 2*].
20. Claims 26 and 32, Anand teaches a web browser; PXE service application; a TFTP application; a Net Boot program; and a boot image [*abstract, col. 1, line 19, col. 6, line 51*].
21. Claim 27, Anand teaches the embedded OS based computer is configured through the web browser [*col. 5, lines 19-25*].
22. Claim 28, Anand teaches the embedded OS based computer is configured directly [*abstract*].
23. Claim 29, Anand teaches wherein the NIC is implemented as part of the microcontroller [*Fig. 2*].
24. Claim 33, Anand teaches the embedded OS based computer includes at least one PXE application to provide desired PXE services [*abstract*].
25. Claim 34, Anand teaches the computer network comprises a plurality of subnetworks of PXE enabled target servers [*col. 3, lines 44-49*].

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26. Claim 35, Anand teaches the embedded OS based computer listens to one of the subnetwork [*abstract*].

27. Claim 36, Anand teaches the data transfer protocol comprises a trivial file transfer protocol [*col. 1, line 19*].

28. Claim 37, Anand teaches the boot server provides the boot image for each target server on the computer network [*col. 6, line 51*].

***Claim Rejections - 35 USC § 103***

29. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

30. Claims 5 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anand et al, US, Pat. No. 6,810,478.

31. Claim 5, Anand fails to teach the embedded OS is Windows CE.

Official notice is taken that both the concept and the advantages of Windows CE is old and well known in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Anand to include Windows CE, because of its fast boot times.

32. Claim 5, Anand fails to teach a handheld computer.

Official notice is taken that both the concept and the advantages of handheld computers is old and well known in the art

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Anand to include a handheld device, because The portability of a handheld device such as a Palm computer is uniquely advantageous for on-site installation and troubleshooting of network equipment at the time the invention was made to modify Anand to include handheld computer

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to A Elamin whose telephone number is (571) 272-3674. The examiner can normally be reached on MON-FRI 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A Elamin  
Primary Examiner  
Art Unit 2116

December 16, 2004

  
A. ELAMIN  
PRIMARY EXAMINER